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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,250	07/11/2003	Lance A. Tatman	10021014-1	4605

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EXAMINER	
WON, MICHAEL YOUNG	
ART UNIT	**PAPER NUMBER**
2155	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/618,250	TATMAN ET AL.	
	Examiner	Art Unit	
	Michael Y. Won	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-51* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the application filed July 11, 2003.

2. Claims 1-51 have been examined and are pending with this action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Roese et al. (US 7,092,943 B2).

INDEPENDENT:

As per **claim 1**, Roese teaches a system for physical location self awareness in network connected devices, said system comprising:

a location server acquiring locations of said devices from a real-time location system (see col.5, lines 11-14: "system 100 stores the location information for all of the connection points of the network of system 100 in location module 185a in location server 134"); and

an agent operable to run on each of said devices (see Fig.1, #185), said agent querying said location server for a location of said device and storing location information for said device on said device (see Fig.3; col.4, lines 9-20: "location module 185 includes functionality... that makes a device location-aware"; and col.17, lines 43-55: "location server transmits (step 330) the location information to the location client... client stores (step 335) the location information").

As per **claim 24**, Roese teaches a method for providing location self awareness in a network connected device, said method comprising:

establishing a location server for acquiring a location of said device from a real-time location system (see col.5, lines 11-14: "system 100 stores the location information for all of the connection points of the network of system 100 in location module 185a in location server 134");

executing an agent on said device (see Fig.1, #185; and col.4, lines 9-20: "location module 185 includes functionality... that makes a device location-aware");

instructing, by said agent, said device to send a query to said location server for location information for said device (see Fig.3; and col.17, lines 43-46: "the location client transmits (step 320) the connection point ID to the location server"); and

storing said location information for said device on said device (see Fig.3; and col.17, lines 43-55: "location server transmits (step 330) the location information to the location client... client stores (step 335) the location information").

DEPENDENT:

As per **claim 2**, which depends on claim 1, Roese further teaches wherein said location server maintains said locations of said devices in a database (see col.7, lines 36-39).

As per **claim 3**, which depends on claim 2, Roese further teaches wherein said location server acquires said locations of said devices when said location server is established (see col.6, lines 1-3).

As per **claims 4 and 29**, which respectively depend on claims 1 and 24, Roese further teaches wherein said location server acquires said location from said real-time location system upon said agent querying said location server for a location of said device (see col.5, lines 62-66).

As per **claims 5, 14, and 30**, which respectively depend on claims 1, 13, and 24, Roese further teaches wherein said location server is an extension of said real-time location system (see Fig.1 and col.5, lines 11-14).

As per **claim 6**, which depends on claim 1, Roese further teaches wherein said agent is software executed by said device (see col.4, lines 19-20).

As per **claim 7**, which depends on claim 1, Roese further teaches wherein said agent is a process incorporated into said device (see col.4, lines 19-20).

As per **claim 8**, which depends on claim 7, Roese further teaches wherein said agent is incorporated into firmware of said device (see col.32, lines 6-11).

As per **claims 9 and 25**, which respectively depend on claims 1 and 24, Roese further teaches wherein said agent queries said location server on boot of said device (see col.2, lines 46-50).

As per **claim 10 and 26**, which respectively depend on claims 1 and 24, Roese further teaches wherein said agent periodically queries said location (see col.23, lines 58-61).

As per **claims 11 and 27**, which respectively depend on claims 1 and 24, Roese further teaches wherein said agent stores said location of said device in memory of said device (see col.17, lines 43-55).

As per **claims 12 and 28**, which respectively depend on claims 1 and 24, Roese further teaches wherein said agent stores said location of said device in mass storage of said device (see col.5, lines 9-11).

As per **claim 13**, which depends on claim 1, Roese teaches of further comprising said real-time location system comprising:

a tag associated with each device to be tracked (see col.29, lines 25-27);

a plurality of receivers, said receivers locating each of said tags (see col.29, lines 34-37); and

a central database of locations of said tagged devices (see col.22, lines 62-64).

As per **claims 15 and 31**, which respectively depend on claims 13 and 24, Roese further teaches wherein said location server comprises a duplicate of said central database (see Fig.8; and col.32, lines 1-2).

As per **claims 16 and 32**, which respectively depend on claims 1 and 24, Roese further teaches wherein said location server pushes location information updates to devices when location data on said location server changes (see col.32, lines 27-31).

As per **claim 17**, which depends on claim 1, Roese further teaches wherein said location information stored on said device is accessible by a user networked to said device (see col.3, lines 8-10).

As per **claims 18 and 35**, which respectively depends on claims 17 and 34, Roese further teaches wherein said location information is accessible by said user via a shell (see col.11, lines 45-51).

As per **claims 19 and 36**, which respectively depends on claims 17 and 34, Roese further teaches wherein said location information is accessible by said user via a simple network management protocol (see col.33, lines 14-16).

As per **claims 20 and 37**, which respectively depends on claims 19 and 24, Roese further teaches wherein said location information is stored in a simple network management protocol management information base variable (see col.39, lines 32-35).

As per **claims 21 and 38**, which respectively depends on claims 20 and 37, Roese further teaches wherein said variable is system information for the device (see col.39, lines 39-50).

As per **claim 22**, which depends on claim 1, Roese teaches of further comprising a plurality of real-time location systems (see col.32, lines 1-2)

As per **claim 23**, which depends on claim 22, Roese teaches of further comprising a location server associated with each of said real-time location systems

(see Fig.1) and a hierarchical server for searching for a location of a device starting from a last known location server outward to a next closest location server (see col.11, lines 54-59).

As per **claim 33**, which depends on claim 32, Roese further teaches wherein, said location information updates are pushed only to devices for which location information has changed (see col.32, lines 27-31).

As per **claim 34**, which depends on claim 24, Roese further teaches comprising: providing access to said stored location information via a network (see Fig.1 and col.2, lines 19-22).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 39-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roese et al. (US 7,092,943 B2) in view of Oehrke et al. (US 6,735,631 B1).

INDEPENDENT:

As per **claim 39**, Roese teaches a system for physical location self awareness in a network connected device across a domain of a plurality of related real-time location systems, said system comprising:

a plurality of location servers, each location server acquiring locations of devices under a real-time location system associated with said location server (see col.5, lines 11-14: "system 100 stores the location information for all of the connection points of the network of system 100 in location module 185a in location server 134"); and

an agent operable to run on each of said devices (see Fig.1, #185), said agent on a device querying a most recent location server associated with said device for a location of said device and storing location information for said device on said device (see Fig.3; col.4, lines 9-20: "location module 185 includes functionality... that makes a device location-aware"; and col.17, lines 43-55: "location server transmits (step 330) the location information to the location client... client stores (step 335) the location information").

Although Roese teaches querying a location servers to return a location of said device, Roese does not explicitly teach a hierarchical server adapted to querying each of said server for a location of said devices if said nearest server fails.

Oehrke teaches querying each of said server for a location of said devices if said nearest server fails (see col.11, lines 40-43).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Roese in view of Oehrke by implementing querying each of said server for a location of said devices if said nearest server fails. One would be motivated to do so because Roese teaches that any device in the network (see Fig.8) can contain the location server functionality (see col.31, line 65-col.32, line 2 and col.32, lines 52-67) and such implementation makes a distributed

system more efficient by allowing requests to be serviced by another distributed device when one cannot.

As per **claim 45**, Roese teaches a method for physical location self awareness in network connected devices across a domain of a plurality of related real-time location systems, said method comprising:

establishing a plurality of location servers, each of said location servers acquiring locations of said devices under a real-time location system associated with said location server (see col.5, lines 11-14: "system 100 stores the location information for all of the connection points of the network of system 100 in location module 185a in location server 134");

executing an agent on each of said devices (see Fig.1, #185; and col.4, lines 9-20: "location module 185 includes functionality... that makes a device location-aware");

instructing, by said agent, that an associated device send a query for location information of said device to a most recent location server associated with said device (see Fig.3; and col.17, lines 43-46: "the location client transmits (step 320) the connection point ID to the location server"); and

storing, by said agent, returned location information for said device on said device (see Fig.3; and col.17, lines 43-55: "location server transmits (step 330) the location information to the location client... client stores (step 335) the location information").

Although Roese teaches querying a location servers to return a location of said device, Roese does not explicitly teach a hierarchical server adapted to querying each of said server for a location of said devices if said nearest server fails.

Oehrke teaches querying each of said server for a location of said devices if said nearest server fails (see col.11, lines 40-43).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Roese in view of Oehrke by implementing querying each of said server for a location of said devices if said nearest server fails. One would be motivated to do so because Roese teaches that any device in the network (see Fig.8) can contain the location server functionality (see col.31, line 65-col.32, line 2 and col.32, lines 52-67) and such implementation makes a distributed system more efficient by allowing requests to be serviced by another distributed device when one cannot.

DEPENDENT:

As per **claims 40 and 46**, which respectively depend on claims 39 and 45, Although Roese teaches querying a location servers to return a location of said device, Roese does not explicitly teaches wherein, said hierarchical server queries a next closest server when said nearest server fails to return data.

Oehrke teaches querying a next closest server when said nearest server fails to return data (see col.11, lines 40-43).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Roese in view of Oehrke by implementing querying a next closest server when said nearest server fails to return data. One would be motivated to do so because one of ordinary skill in the art would correlate distance to speed (i.e., the shorter the distance for data to travel the better the response time).

As per **claims 41 and 47**, which respectively depend on claims 40 and 46, Although Roese teaches querying a location servers to return a location of said device, Roese does not explicitly teaches wherein said hierarchical server queries a further next closest server when said next closest server fails to return data.

Oehrke teaches querying a further next closest server when said next closest server fails to return data (see claim 40 and 46 rejection above).

As per **claims 42 and 48**, which respectively depend on claims 39 and 45, Roese further teaches wherein a newly assigned location server pushes a location information update for a moved device (see claim 16 rejection above).

As per **claims 43 and 50**, which respectively depend on claims 42 and 48, further teaches wherein said location information update is pushed to a previous location server to which said moved device was assigned (see col.32, lines 27-31).

As per **claims 44 and 51**, which respectively depend on claims 42 and 48, further teaches wherein said location information update is pushed to said moved device (see col.32, lines 27-31).

As per **claim 49**, which depend on claim 48, further teaches wherein said pushing is carried out in response to said device moving into said newly assigned location server's associated real-time locations system's area (see col.32, lines 27-31).

Conclusion

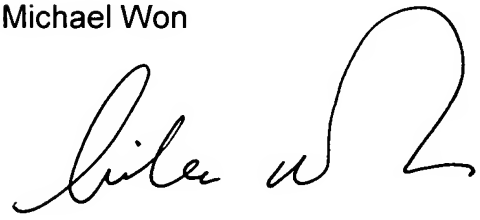
5. For the reason above, claims 1-51 have been rejected and remain pending with this action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Y. Won whose telephone number is 571-272-3993. The examiner can normally be reached on M-Th: 7AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael Won



March 1, 2007